

GE Nuclear Energy

General Electric Company 3901 Castle Hayne Road, Wilmington, NC 28401

August 16, 2004 MFN 04-080

Document Control Desk
United States Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852-2738

Subject:

Part 21 60-Day Interim Notification: Narrow Range Water Level Instrument Level 3 Trip

This letter provides a 10CFR21(a)(2) 60-Day Interim Report notification regarding a potential issue with the Level 3 trip from the narrow range water level instruments that initiate reactor scram. A conservative evaluation by GE Nuclear Energy (GENE) has determined that water level instruments may indicate high by as much as 8", should the reactor water level drop below the dryer scal skirt. At issue is whether with the actual water level as much as 8" lower than indicated, the top of active fuel (TAF) will be uncovered for the limiting loss of feedwater event due to

- '.. Actual water level being lower than indicated when the Level 3 trip occurs, or
- 2. Failure of the Level 3 trip to occur if water level drops below the narrow range instrument variable leg tap prior to reaching the Level 3 trip setpoint.

Because TAF is a Technical Specification Safety Limit, TAF uncovery for a loss of feedwater event would be a Reportable Condition. However, it would not lead to a significant safety hazard due to multiple automatic and passive protection features of a BWR.

GENE has completed analyses for BWR/2/3 plants and determined that this is not a reportable condition (i.e., the TAF safety limit is protected). GENE has not completed the analyses for BWR/4-/6 plants. For these plants, GENE has determined that actual water level being lower than indicated by up to 8" when the Level 3 trip occurs does not lead to 7'AF uncovery. However, for these plants GENE has not determined if water level could drop below the narrow range instrument variable leg tap prior to reaching the Level 3 trip setpoint.

Therefore, this letter is issued as a 60-Day Interim Notification under 10CFR21.21(a)(2) to the BWR/4-/6 plants listed in Attachment 1. The potentially affected plants are being concurrently notified of this situation by a GENE Safety Communication letter. GENE is committed to complete the evaluation by October 11, 2004.

August 16, 2004 MFN 04-080

If you have any questions, I may be reached at 910-675-6608.

Sincerely,

Jason. S. Post, Manager

Engineering Quality & Safety Evaluations

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PRC File

August 16, 2004 MFN 04-080

Attachment 1 - Potentially Affected Plants

Result (1)	Utility	Plent
x	AmerGen Energy Co.	Clinton
	AmerGen Energy Co.	Oyster Creek
x	Carolina Power & Light Co.	Brunswick 1
X	Carolina Power & Light Co.	Brunswick 2
	Constellation Nuclear	Nine Mile Point I
X	Constellation Nuclear.	Nine Mile Point 2
x	Detroit Edison Co.	Ferml 2
	Dominion Generation	Millstone 1(2)
X	Energy Northwest	Columbia
X	Entergy Nuclear Northeast	FitzPatrick
	Entergy Nuclear Northeast	Pilgrim
X	Entergy Operations, Inc.	Grand Gulf
X	Entergy Operations, Inc.	River Bend
	Entergy Nuclear Northeast	Vermont Yankee
	Exelon Generation Co.	CRIT Facility
	Exclon Generation Co.	Dresden 2
	Exelon Generation Co.	Dresden 3
X	Excion Generation Co.	LaSalle 1
X	Exelon Generation Co.	LaSalic 2
X	Exclon Generation Co.	Limerick 1
X	Exclon Generation Co.	Limerick 2
x	Exclon Generation Co.	Peach Bottom 2
x	Exclon Generation Co.	Peach Bottom 3
	Exclon Generation Co.	Quad Cities 1
	Exclon Generation Co.	Quad Cities 2
X	FirstEnergy Nuclear Operating Co.	Perry I
X	Nebraska Public Power District	Cooper
X	Nuclear Management Co.	Duane Arnold
	Nuclear Management Co.	Monticello
	Pooled Equipment Inventory Co.	PIM
X	PPL Susquehanna LLC.	Suaquehanna 1
X	PPL Susquehanna LLC	Susquehanna 2
<u>X</u>	PSEG Nuclear	Hope Creek
<u> </u>	Southern Nuclear Operating Co.	Hatch 1
<u>x</u>	Southern Nuclear Operating Co.	Hatch 2
<u> </u>	Tennessee Valley Authority	Browns Ferry 1 (2)
X	Tennessee Valley Authority	Browns Perry 2
X	Tennessee Valley Authority	Browns Ferry 3

Notes:

- X = Evaluation incomplete; subject of 60-Day Interim Notification
 1 l'ant is in an extended shutdown

August 16, 2004 MFN 04-080

Attachment 2 - Available Information per §21.21(b)

- (i) Name and address of the Individual providing the information:
 J. S. Post, Manager, Engineering Quality & Safety Evaluations, GB Nuclear Energy, 3901 Castle Hayne Road, Wilmington, NC 28401
- (ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity that contains a deviation or failure to comply:

The evaluation is incomplete for the BWR/4-/6 plants identified in Attachment 1. The potential deviation is specification of a water level instrument Level 3 trip Analytical Limit that is too close to the Instrument variable leg tap such that the tap could uncover before the trip occurs.

- (iii) identification of the firm constructing the facility or supplying the basic component which contains a deviation or failure to comply:
 - Licensees are responsible to establish the Level 3 trip Analytical Limit.
- (iv) Nature of the defect or safety hazard that could be created by such a deviation or failure to comply:
 - If water level were to drop below the variable leg tap without generating a Level 3 trip, it could lead to violation of the top-of-active fuel Technical Specification Safety Limit.
- (v) The date on which the information of such a deviation or failure to comply was obtained;
 - This concern was identified in the GENE safety evaluation program on June 17, 2004.
- (vi) In the case of a basic component that contains a deviation or failure to comply, the locations of all such components in use or being supplied:
 - GENE has not completed the evaluation for the BWR/4-/6 plants identified in Attachment 1. GENE has concluded there is not a deviation or failure to comply for the BWR/2/3 plants.
- (vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action (note, these are actions specifically associated with the identified deviation or failure to comply):
 - GENE will complete the evaluation by October 11, 2004. No actions are recommended while this condition is under evaluation.
- (viii) Any advice related to the deviation or failure to comply about the facility, activity, or basic component that has been, is being given to purchasers or licensees:
 - BWR/4-/6 plants for which there is greater than 8" separation between the variable leg tap and the Level 3 AL can immediately determine that this condition is not a concern and this is not a Reportable Condition under 10CFR21.